

THE FOOD, AGRIBUSINESS AND RURAL MARKETS (FARM) PROJECT

Extension Services and Training Needs Assessment

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

AAH-I Action Africa Help-International

CTC Crop Training Centre

FaaB Farming as a business

FARM Food, Agribusiness and Rural Markets Project

FBO Farmer-based organization

GAP Good agronomic practices

ICT Information and communication technology

IPM Integrated pest management

M&E Monitoring and evaluation

MAF Ministry of Agriculture and Forestry

MAFTARFCRD Ministry of Agriculture, Forestry, Tourism, Animal Resources, Fisheries,

Cooperatives and Rural Development

NALEP National Agriculture and Livestock Extension Policy

NGO Nongovernmental organization

PEW Payam Extension Worker

PM&E Participatory monitoring and evaluation

RSM Risk and Strategic Management Consulting

SOW Statement of work

TNA Training needs assessment

TOT Training of trainers

USAID United States Agency for International Development

YATC Yei Agricultural Training Centre

EXECUTIVE SUMMARY

The United States Agency for International Development (USAID)-funded Food, Agribusiness and Rural Markets (FARM) Project is designed to increase agricultural productivity, increase trade, and improve the capacity of producers and private sector and public sector actors. The project has developed an extension service program that employs 39 extension workers. At this stage, these workers have received basic agronomy training, but they need to enhance their skill level from promotion of production techniques to encompass a wider range of skills.

The primary purposes of this assignment were to I) conduct an overall assessment of extension service needs and the current capabilities of the project's extension program; and 2) based on identified critical training needs, develop a training program that will increase FARM's capacity to deliver improved extension services.

The study recommends the following improvements to the project's extension component:

- Introduce participatory planning, including simple value chain analysis for selection of crop(s) and preparation of basic enterprise plans.
- Initiate work to strengthen farmers' organizations as soon as they join the project.
- Motivate farmers to provide extension services.
- Systematically make use of well-established farmer-based organizations (FBOs) to introduce FARM concepts to new groups.
- Involve farmers in supervision, follow-up, and monitoring and evaluation (M&E) activities, through participatory monitoring and evaluation (PM&E).
- Include critical cross-cutting issues in training of staff and in general extension work.
- Intensify involvement of the Ministry of Agriculture, Forestry, Tourism, Animal Resources, Fisheries, Cooperatives and Rural Development (MAFTARFCRD) in field supervision and M&E.
- Build MAFTARFCRD capacity to play its role in stakeholder coordination and collaboration.
- Improve time management; streamline activities.
- Consider involving office-based FARM specialists in broader project activities.
- Translate selected extension materials into local languages.

The following training modules have been prepared, catering to identified training needs:

- I. Know your project (facts about FARM)
- 2. FARM extension model
- 3. Project management
- 4. Collaboration and networking
- 5. Farmer organizations/community empowerment
- 6. Planning with farmers

- 7. Training and extension methods
- 8. Farming as a business (orientation course)
- 9. Marketing (orientation course)
- 10. Monitoring and evaluation
- 11. Cross-cutting issues

The following training needs to be arranged on individual basis:

- Computer use
- English language

The study proposes the following main strategies for planning and running the various training programs:

- I. Bring all participants to one training event, to allow staff from all project areas to interact and share experiences.
- 2. Select a venue within the FARM Project area, so that field visits can be arranged to participating FBOs and practical field exercises can be organized with FBOs in the area.
- 3. Avoid having training dwell too long on theories; trainees need to learn by doing through practical exercises, both in class and in the field with farmers. Avoid rushing through sessions.
- 4. Assign a course facilitator (selected from within FARM or hired for this assignment) to coordinate preparation of a training manual for the course. Have the facilitator guide and supervise resource persons in preparing their parts of the training manual.
- 5. Give each participant a course folder (to be prepared well before the training) that contains all lecture notes and other materials, such as operational procedures and manuals, used in the training.

I. INTRODUCTION

I.I Background to the Study

FARM is a five-year USAID-funded project designed to rapidly increase agricultural productivity in selected commodities, increase trade and market linkages, and improve the capacity of producers and private sector and public sector actors in South Sudan to develop commercial smallholder agriculture. The project, started in February 2010, runs until February 2015. It works in the Greenbelt agroecological zone: Central Equatoria State, Eastern Equatoria State, and Western Equatoria State.

Currently, the status of extension services in South Sudan is poor. Rural smallholder farmers receive very little public sector support. To address this issue, the FARM Project has developed an extension services program that includes three state-level, nine county-level, and 27 payam-level extension workers. The Payam Extension Workers (PEWs) have one year of work experience with the project. They have received basic agronomy training from the FARM Project but need further development programs to enhance their skill levels.

Historically, extension staff have been trained to promote production techniques in order to enhance productivity of traditional staple crops. However, there is a significant need for extension workers to provide services that require a much wider range of skills. To address this situation, the FARM Project is planning to develop a program to bolster and broaden its extension services.

The project hired a consultant to conduct an extension services and training needs assessment (TNA). The primary purposes of this assignment were to 1) conduct an overall assessment of extension service needs and the current capabilities of the project's extension program; and 2) based on identified critical training needs, develop a training program that will increase FARM's capacity to deliver improved extension services. The Statement of Work (SOW) in Appendix 1 provides more complete information about this assignment.

I.2 Statement of Work

- Assess the FARM extension model's effectiveness in meeting extension needs. Suggest improvements.
- Complete a TNA that examines the competencies required by extension personnel, based on
 overall project goals and job descriptions, as well as on the needs of farmers and local
 government counterparts. Consider extension agents' educational backgrounds, previous
 training, and work experience. Relate training needs to the current performance of extension
 staff; consider needs for program changes, including new ways of working.

1.3 Deliverables

- Training needs assessment report, including information collected, findings, and recommendations to bolster and increase the capacity of FARM's extension services program.
- Extension services training strategy document for project and local government counterparts, including local partner arrangements and use of local trainers.

•	Four to six completed training modules coving the main training components of FARM's extension program.

2. METHODOLOGY

The study was based on a literature review and interviews with project staff, government officers, and farmers at the national, state, county, payam, and boma levels.

2.1 Interviews

The consultant used the following checklists:

- I. Checklist for interviews with staff:
 - ✓ Educational background (training and experience in the agricultural sector)
 - ✓ How is extension carried out?
 - ✓ Main tasks in performing the job
 - ✓ What is easy?
 - ✓ What is hard?
 - ✓ What are your training needs? What are the needs of your superior and of staff under your supervision?

2. Checklist for interviews with FBOs:

- ✓ When was group formed and with what purpose?
- ✓ Where is the group now?
- ✓ Group ambitions/future plans
- ✓ Describe what FARM has provided to your FBO
- ✓ Comment on quality of services
- ✓ Indicate additional extension needs
- ✓ How can FARM improve services to your group?

2.2 Assessment of the Effectiveness of the FARM Extension Model

The consultant used information from interviews with staff and farmers to identify the extension approaches and methods being used. The FARM Project's achievements (drawn from project reports) were compared with goals and objectives to establish strengths and weaknesses in the extension model. The study also obtained farmers' views on extension needs and on the effectiveness of the extension services received. The consultant then compared the FARM model with the extension system prescribed in the National Agriculture and Livestock Extension Policy (NALEP), to identify changes that would improve its effectiveness in addressing farmers' needs. The study also looked into the extension personnel's work situations and proposed changes for more efficient use of their time.

The TNA used information from interviews with staff and farmers to list tasks and duties handled by extension workers. Skills needed for carrying out the tasks were identified, together with additional skills needed to implement proposed changes in the extension approach. Staff-perceived training needs were recorded during interviews. The consultant used the number of requests for certain types of training to prioritize needs. In addition, all the skills needed to change the extension approach were given priority for in-service training. In developing the training modules, the consultant grouped skills under a number of areas of competency. A training module was formulated for each area.

3. AREAS VISITED

The study covered interviews with FARM headquarters staff and visits to all three states included in FARM. Places visited:

- I. Central Equatoria State (MAFTARFCRD in Juba; FARM office in Yei)
 - ✓ Yei County
 - ✓ Morobo County
 - ✓ Yei Crop Training Centre (CTC)
- 2. Eastern Equatoria State (FARM Office in Torit)
 - ✓ Torit County
 - √ Ikotos County
- 3. Western Equatoria State (Consultant met Coordinator and Senior Extension Officer in Mundri)
 - ✓ Mundri County
 - ✓ Maridi (Staff met consultant in Mundri)

4. EFFECTIVENESS OF THE EXTENSION MODEL

4.1 Achievements in the Field

Similar to findings from the FARM Mid-Term Review, the assessment found that extension services focusing on production aspects have resulted in increased production. There have been promising results over the last year in promoting the cooperative movement, which encourages FBOs to form cooperative societies and establish cooperative unions. There has been little progress, however, in increasing smallholders' access to market services or in improving business management and service skills in the private sector.

4.2 Extension Needs Expressed by Farmers

Interviews with FBOs showed that most of the farmer groups had been in existence before joining FARM and had experience from earlier projects. They appreciated that provision of improved seeds and adoption of good agronomic practices (GAP) had significantly increased their yields from selected crops.

However, marketing of the farmers' surplus produce is a common problem, since they are often unable to obtain acceptable prices. In an effort to avoid being criticized by group members for accepting low prices, the group leaders hold onto the produce to await better prices, thus risking storage losses and part of the produce not being sold. This situation is partly a result of low levels of trust between actors along the value chain and partly a result of producers' limited understanding of the farm gate price concept. Their price expectations relate to consumer prices, ignoring costs along the value chain.

The situation is a reflection of producers' limited knowledge of farming as a business (FaaB). Farmers also have a limited capacity to identify the production costs that should form the basis of discussions about acceptable farm gate prices.

In addition to GAP, as groups become more experienced training is gradually covering other technical areas, such as value addition and post-harvest handling. So far, few farmers have been trained in FaaB and marketing. They express an urgent need for this training. Farmers also had the following comments about the FARM Project's extension services:

- One-day trainings are too short and do not reach all farmers.
- The train-the-trainer (ToT) system is not working well; messages get lost along the chain of trainers.
- The project should motivate farmers to do extension.
- Extension officers need to spend time on questions and dialogue with farmers.
- More training in marketing is needed, as is training in integrated pest management (IPM), FaaB, farm mechanization, post-harvest handling, seed multiplication, and management of a cooperative society.

- Extension materials need to be translated into forms that can be adapted by the local community; this may be through written translation into local languages but most frequently is through training local people who can verbally transfer information to the community population.
- Farmers need to be connected with credit institutions.
- Many FBOs miss out on plowing grants, as the criteria have not been well-explained.
- The project should provide processing equipment and machinery.

4.3 FARM Extension Approach and Methods Being Used

The FARM extension model is using a group approach, working with FBOs of around 20 members each. It also uses the ToT concept, where selected farmers are trained to train their fellow farmers. The main extension methods being used are demonstration plots, demonstration of technologies in front of groups, farm visits for follow up, field days, farmer-to-farmer visits, and agricultural shows.

The consultant observed that the extension model tackles extension needs in steps. It initially focuses on increasing production (since without surplus, there is no need to discuss marketing!) and then moves on to FaaB and marketing components, along with encouraging FBOs to transform themselves into cooperative societies. This step-by-step process risks discouraging groups who find themselves with surplus farm produce for sale but no plan for selling it. The dilemma is a result of the traditional production-oriented extension model. It misses out on opportunities to help farmers break away from past relief-oriented programs and lead them toward commercial farming. A change to a market-oriented extension approach need not be very dramatic, but it would certainly entail a change of mindset among extension workers, farmers, and other stakeholders, since it would change their roles.

4.4 Strategic Requirements of Extension Approaches and Methods

South Sudan's NALEP (ratification pending) was developed based on experiences in the East African Region and overall trends in extension delivery systems that target small-scale farmers. The policy calls for an extension system that caters to broader needs in promoting smallholder commercial farming, as follows:

- I. **Demand-driven** and beneficiary-led approaches in selection of technologies and extension messages
- 2. Use of **participatory** approaches
- 3. **Empowerment** of clients through guidance on establishing and running local institutions
- 4. Linkages between clients and service providers
- 5. Strong stakeholder linkages, including coordination and networking among extension service providers (ESPs) at all levels
- 6. Use of various information and communication technologies (ICTs)
- 7. A market-oriented approach that works along value chains
- 8. A mechanism for soliciting support for projects that **tackle** identified **bottlenecks along value chains** (e.g., rural access roads, micro-irrigation schemes, minor dams and bridges, market centers, livestock holding grounds, access to credit, input supply)

- 9. Incorporation of relevant **cross-cutting issues** (HIV/AIDS, gender equity, hygiene and sanitation, sustainable natural resource management, etc.) by extension service providers
- 10. Extension approaches that work with groups for cost-effectiveness and coverage

4.5 Analysis of FARM Extension Model

The FARM extension model has many of the desired features listed above, but it is weak in other areas. The findings from the analysis are summarized as follows:

Participatory approaches. FARM's use of participatory approaches is weak. The program will require a change of mindset from its earlier approach, which involves limited dialogue between extension workers and clients and mainly relies on passing messages and instructions to farmers. This works well when advising on production but is less effective in addressing broader extension needs.

Participatory planning provides a powerful tool for establishing a close working relationship with communities (in this case mostly existing groups—FBOs). The dialogue during planning would need to clarify what the project stands for and identify FBO needs and opportunities. It would prepare the group to make choices on enterprises and activities to enter into. To strengthen commitment by clients, it is also advisable to involve them in PM&E activities. Participatory approaches generally form the basis of a move towards demand-driven extension, which FARM's extension program should aim for in the long run.

Community empowerment. FARM's efforts in community empowerment focus on support for group formation and for development of groups into cooperative societies. To improve effectiveness, the work to strengthen the groups should ideally start at the very beginning when groups join the FARM extension program.

Linking clientele with service providers. Extension is expected to link clientele with service providers and markets. This is an important component included in the FARM model. It is expected to produce results through intensified activities to promote service providers' entrance into the market and to build their capacity.

Stakeholder linkages. FARM is supporting stakeholder meetings organized by MAFTARFCRD and will further facilitate the ministry in its coordinating role by supporting computerization of its office.

Use of various ICT options. For improved efficiency in extension, the various ICT options available need to be assessed. FARM is in the process of providing computers, which will enhance extension workers' access to information and enable them to prepare extension materials. Providing a wider choice of information avenues and materials would be an important way to make the extension component more effective.

Working along value chains. The extension approach should be market-oriented, working along value chains. Currently, the program takes FBOs through different stages; the value chain aspect comes in as groups prepare to register as cooperative societies. A local value chain analysis should be part of a participatory planning exercise. To do this, the analysis should be developed with the community participants as soon as value chain development is initiated with that community.

The approach should have a mechanism for soliciting support for projects that tackle bottlenecks along value chains (e.g., rural access roads, market centers). The Mid-Term Evaluation report stated, "To the

extent possible, although opportunities appear limited, the project should make every effort to coordinate with other donor activities that rehabilitate roads."

Cross-cutting issues. Extension service providers are expected to incorporate relevant cross-cutting issues (HIV/AIDS, gender equity, hygiene and sanitation, sustainable natural resource management) into activities. This aspect is new to the project. FARM needs to train its staff to mainstream relevant cross-cutting issues into training sessions with farmers. Currently the project is working on gender equity.

4.6 Work Situation for Extension Personnel

The project's extension staff are involved in a wide range of activities (see Table I below). They need to plan their work well to be able to perform all their duties. The project is making efforts to reduce their workload to enable them spend more time with clients. These efforts include increasing the involvement of farmers in extension (farmer-to-farmer) and increasing farmers' participation in M&E. As a result of ongoing efforts to build the capacity of collaborators, the project is expected to attract greater involvement by MAFTARFCRD, particularly in stakeholder coordination and in M&E work.

Table I: Variety of Tasks for Extension Staff at County and Payam Level

I. Project management and implementation of support functions

- Planning project activities/preparing monthly and weekly work plans
- Managing project activities in the field on a day-to-day basis: plowing grants, seed distribution, seed
 multiplication, county demonstration plots, on-farm grain storage trials, rainfall data collection, distribution of
 post-harvest equipment, market information collection, etc.
- Supervising/providing technical backstopping of PEWs (by County Extension Officers)
- Carrying out data collection and assessments (seed needs, yields, FBO capacities, plowing grant eligibility, capacity to receive equipment for post-harvest handling, market information, rainfall data)
- Monitoring/supervising FARM activities (with involvement by lead farmers)

2. Extension component

- Mobilizing and planning with farmer groups
 - √ Identifying FBOs
 - ✓ Mobilizing and sensitizing new FBOs to join project.
 - ✓ Training on group formation and management
 - ✓ Conducting value chain analysis (local)
 - ✓ Preparing enterprise plans
 - ✓ Holding community meetings
 - ✓ Conducting ToT training for lead farmers
 - ✓ Helping develop FBOs into cooperatives
- Training, demonstrations, study tours, etc.
 - ✓ Developing training materials
 - ✓ Conducting training at county and payam levels
 - ✓ Carrying out training and demonstrations in selected technical areas
 - ✓ Planning and carrying out farmer field days
 - ✓ Arranging farmer-to-farmer visits
 - ✓ Establishing, managing, and monitoring demonstration plots
 - ✓ Supervising and monitoring FBO activities
- Networking with stakeholders and collaborators
 - ✓ Working in partnership with Ministry of Agriculture and Forestry (MAF)* county staff and PEWs
 - ✓ Identifying service providers and linking them with farmers

- Linking smallholders to markets
 - ✓ Arranging farmer—trader fora
 - ✓ Creating value chain linkages with Payam Extension Workers
 - ✓ Assessing available quantities of produce for sale
 - ✓ Contacting potential buyers of farm produce to initiate negotiations
 - ✓ Marketing data collection and transmission by using smartphones

4.7 Recommendations for Improvements to FARM Extension Model

The assessment resulted in the following recommendations for improvements to the FARM extension model:

- 1. Introduce participatory planning, including simple value chain analysis for selecting crop(s) (possibly limiting choices to one or a maximum of two crops) and preparing basic enterprise plans.
- 2. Initiate work to strengthen farmers' organizations as soon as they join the project.
- 3. Motivate farmers to do extension (develop clear guidelines for the ToT system to enable effective farmer-to-farmer extension).
- 4. Systematically make use of well-established FBOs and cooperative societies to introduce the FARM concept to new groups (whose group leaders would visit and learn from experienced groups).
- 5. Involve farmers in supervision, follow-up, and M&E activities (especially PM&E).
- 6. Include critical cross-cutting issues in training staff and in general extension work.
- 7. Intensify MAFTARFCRD involvement in field supervision and M&E, including creating and managing a database for information collected by FARM and other actors.
- 8. Build MAFTARFCRD's capacity to play its role in stakeholder coordination and collaboration.
- 9. Improve time management; streamline activities (e.g., streamlining reporting within the FARM consortium).
- 10. Consider involving state office-based FARM specialists in the extension program.
 - ✓ Mobilize some or all specialists to be involved in intensified effort to move faster on FaaB
 and marketing component.
 - ✓ Consider giving geographical responsibilities to specialists in supervising field activities (weak field staff require intensive supervision).
- 11. Translate selected extension materials into local languages.
- 12. Provide extension kits to extension workers, including rucksacks to carry materials when riding their motorbikes and generally when in the field.

^{*}The state ministries that supervise the counties have not been amalgamated with animal resources, fisheries, or tourism (as the national ministry has), leading to different names and acronyms.

5. TRAINING NEEDS

The TNA established the overall competencies and skills required to implement the FARM Project at the county and payam levels by identifying the tasks and duties to be performed by extension personnel, and then listing competencies and skills needed for those duties.

Table 2 below displays the tasks that were identified during interviews with staff, as well as additional tasks that would be needed to implement proposed improvements to the extension model. The tasks have been grouped under seven main activities: i) project management, ii) collaboration and networking, ii) clientele organization/community empowerment, iv) participatory planning, v) provision of training and extension, vi) technical areas/contents of extension packages, and vii) monitoring and evaluation.

Tasks	Competencies/Skills Required				
Project Management (Mainly at County Level)					
 Manage programs Supervise and coach staff Monitor staff activities 	 Program management Project cycle Communication Computer 				
2. Collaboration and Networking (Mainly at County	Level)				
 Identify key stakeholders, including service providers Initiate and support sector stakeholder meetings Create value chain linkages Work in partnership with agriculture, cooperatives, and other departments at county level Build capacity of collaborators 	 Understanding of all aspects of FARM project Stakeholder analysis Methods of networking Communication Public relations English language 				
3. Clientele Organization/Community Empowerment					
 Mobilize farmer groups/FBOs Train farmers in group management Assist in developing FBOs into cooperatives Provide management training of cooperative unions and societies Assist FBOs in project proposal preparation 	Community mobilization Farmer group management Farmer organization and cooperative development				
4. Participatory Planning					
Plan FARM activities (prepare monthly and weekly work plans)	 Understanding of all aspects of FARM project Understanding of the agricultural extension system Knowledge of participatory planning process Value chain analysis (locally involving FBOs) Enterprise plan preparation Preparation of farm business plans Project proposal writing 				

Tasks	Competencies/Skills Required				
5. Provision of Training and Extension Services					
 Train extension staff and innovative farmers Train farmers through: ✓ demonstrations ✓ farmer field days ✓ farmer-to-farmer visits Offer technical support to FBOs and individual farmers through regular visits Establish and manage demonstration plots Hold agricultural shows Conduct on-farm trials Create awareness of cross-cutting issues (gender, environment, health, etc.) 	 Extension approaches and methods Development of training and extension packages Communication Mainstreaming of relevant cross-cutting issues 				
6. Technical Areas/Contents of Extension Packages					
 Advise/train clients in technical areas such as: Good agronomic practices Seed multiplication Post-harvest handling/storage Integrated pest management Value addition/agro-processing Formation and management of cooperative associations and unions Farming as a business	 Technical skills in areas such as: Good agronomic practices Post-harvest handling Integrated pest management Farming as a business Marketing Value addition/processing Seed multiplication Farm mechanization Conservation agriculture Tractor handling Relevant cross-cutting issues 				
7. Monitoring and Evaluation					
 Assess FBO progress (participatory monitoring and evaluation) ✓ Carry out yield assessments ✓ Monitor adoption rate ✓ Monitor use of provided equipment Collect data and complete documentation ✓ Collect market information ✓ Collect rainfall data ✓ Create and manage database of project information Monitor and evaluate program activities Write and compile reports 	 Monitoring and evaluation Participatory monitoring and evaluation Data collection Database creation Report-writing Computer skills 				

5.1 Identified Critical Skill Gaps/Training Needs in Areas of Required Competence

Extension program management. The FARM Project carries out a broad range of activities that need careful planning. Managers must also be skilled in their role as coordinators and in supervising staff.

Specific training needs in this area of competence: planning, coordination, and supervision of FARM activities.

Collaboration and networking. Staff need to be able to collaborate and network with other stakeholders. MAFTARFCRD counterparts also need to acquire such skills, since they are expected to play a major role.

Specific training needs in this area of competence: stakeholder analysis, methods of networking, communication skills, and public relations skills.

Clientele organization/community empowerment. The FARM extension program needs to make full use of the benefits that come from working with groups, by helping to develop and strengthen the groups from an early stage.

Specific training needs in this area of competence: community mobilization, group organization and management, formation and management of cooperative societies.

Participatory planning. FARM needs to introduce participatory methods in planning and M&E. For planning, it is important for farmers to be involved in a simple value chain analysis exercise, so that they can compare the potential advantages of different crops. Farmers should also be involved in preparing a simple enterprise plan (business plan) to look into production costs and the farm gate price that would be required to make the production viable. As of now there is very limited participatory planning.

Specific training needs in this area of competence: understanding all aspects of the FARM Project, understanding the FARM extension model, local level participatory planning, value chain analysis, enterprise planning, local resource mobilization.

Provision of training and extension services. To date, the FARM extension program has worked primarily on training farmers on production aspects by passing messages and demonstrating techniques. Although this training of farmers has had a positive impact, communication skills need to be improved. In addition, the ToT model needs to be strengthened, as there have been complaints about its effectiveness. Generally, there is need to prepare guidelines for service provision and to train staff in implementation.

Specific training needs in this area of competence: understanding the FARM extension approach, understanding the training and extension methods used by FARM, communication skills, mainstreaming relevant cross-cutting issues.

Technical areas/contents of extension packages. Extension packages are taught using the ToT system. This is a continuous process that will cover all technical areas. There is, however, a marked gap in knowledge of FaaB and marketing, which needs to be urgently filled. It is particularly important to develop these skills because they will be needed during the participatory planning stage, value chain analysis, and preparation of enterprise plans. The TNA proposes that FaaB and marketing components

be included in training. This should be seen as introductory training that will not go into the level of details that will later follow in the ToT training.

Specific training needs in this area of competence: value chain analysis (local), identification of viable enterprises, preparation of enterprise plans/business plans, farm record-keeping, marketing strategies.

Monitoring and evaluation/participatory monitoring and evaluation. The project has a strong M&E component and staff are involved in all aspects of it. However, there are skills gaps that results in complaints about the quality of reports and about assessment forms not being completed satisfactorily. Since MAFTARFCRD is mandated to play a major role in M&E (coordinating collection and compilation of data), its staff also need training to enhance their skills. In addition, PM&E needs to be introduced to get farmers more closely involved in monitoring their achievements.

Specific training needs in this area of competence: understanding the role of FARM M&E, PM&E, reporting formats, report-writing, computer skills.

5.2 Prioritization of Training Needs

During interviews, the consultant recorded staff-perceived training needs. (See Appendices 3 and 4 for more information). The basis for prioritization of training needs, as shown in Table 3 below, was the number of requests for certain types of training. In addition, all the skills identified by the TNA as needed to implement proposed changes in the extension approach have been prioritized for training.

Table 3: Prioritization of Training Needs

Needed Competencies/Skills	Number of Demands	Priority*		
Project Management (Mainly at County Level)				
Program management	6	Yes		
Project cycle management	3	Yes		
Communication	12	Yes		
Computer use	15	Yes		
Planning	4	Yes		
Coordination and Networking				
Understanding all aspects of FARM Project	Skills to build PEW capacity	Yes		
Stakeholder analysis	Skills to build PEW capacity	Yes		
Methods of networking	Skills to build PEW capacity	Yes		
Communications	12	Yes		
Public relations	Skills to build PEW capacity	Yes		
Identification of traders and linkages with farmers	Skills to build PEW capacity	Yes		
English language	2	Yes		
Clientele Organization/Community Empowerment				
Community mobilization	Skills to build PEW capacity	Yes		
Farmer group management	9	Yes		
Farmer organization and cooperative development	4	Yes		

Needed Competencies/Skills	Number of Demands	Priority*		
Planning				
Understanding all aspects of FARM Project Skills to build PEW capacity				
Understanding agricultural extension system	Skills to build PEW capacity	Yes		
Participatory planning process	Skills to build PEW capacity	Yes		
Value chain analysis (locally, involving FBOs)	Skills to build PEW capacity	Yes		
Preparation of enterprise plans	Skills to build PEW capacity	Yes		
Project proposal-writing	4	No		
Provision of Training and Extension Services				
Extension approaches and methods	11	Yes		
Development of training and extension packages	Skills to build PEW capacity	No		
Communication	12	Yes		
Mainstreaming of relevant cross-cutting issues	Skills to build PEW capacity	Yes		
Photography	I	No		
Technical Areas/Contents of Extension Packages				
Technical areas such as:				
Good agronomic practices	2	No		
Post-harvest handling	2	No		
Integrated pest management	6	No		
Farming as a business	I	Yes**		
Farm record-keeping	6	Yes		
Farm business plan development	3	Yes		
Marketing	4	Yes		
Value addition/processing	I	No		
Seed multiplication	Skills to build PEW capacity	No		
Farm mechanization	I	No		
Conservation agriculture	I	No		
Tractor handling	I	No		
Relevant cross-cutting issues	Skills to build PEW capacity	Yes		
Modern agriculture	I	No		
Monitoring and Evaluation				
Monitoring and evaluation	8	Yes		
Participatory monitoring and evaluation Skills to build PEW capacity				
Data collection 2		Yes		
Database creation Skills to build PEW capacity				
Report-writing 5				
Computer 15				

^{*}Priorities proposed by the consultant based on staff demand and on needs identified by the consultant in relation to implementation of proposed changes to the FARM extension model

^{**}Prioritized for implementation of proposed changes

6. PROPOSED TRAINING MODULES

This chapter lays out the proposed training modules for two-week in-service training for FARM extension staff and county-level MAF counterparts.

6.1 Overview of Training Modules

Table 4 below provides an overview of the 11 training modules proposed for a two-week in-service training course.

Table 4: Overview of Proposed Training Modules and Time Allocated

Training Modules	Time Allocated (Hours)	
Know your project (facts about FARM)	4	
2. FARM extension model	4	
3. Project management	4	
4. Collaboration and networking	4	
5. Farmer organizations/community empowerment	8	
6. Planning with farmers	12	
7. Training and extension methods	12	
8. Farming as a business (orientation course)	8	
9. Marketing (orientation course)	8	
10. Monitoring and evaluation	12	
11. Cross-cutting issues	4	
Total Time	80	
Training to be arranged on individual basis:		
Computer use		
English language		

6.2 Detailed Training Modules

The following detailed training modules are proposed.

Module 1. Know your project (facts about FARM): 4 hours

Objective of the session: Understand and comprehend the FARM Project, be able to explain concepts and operational procedures in detail to clients and collaborators, and be confident in carrying out tasks and responsibilities

- Subtopics to be covered:
 - √ Project objectives

- ✓ Outputs
- ✓ Area coverage
- ✓ Components and activities
- ✓ Implementation modalities at county and payam levels
- Main learning points:
 - ✓ Describe project to clients and collaborators
 - ✓ Know roles of stakeholders participating in the project
 - ✓ Know implementation modalities at county and payam levels
- Activities by instructor and learner:
 - ✓ Lectures
 - ✓ Plenary discussions

Module 2. FARM extension model: 4 hours

Objective of the session: Understand the FARM extension model and its components and be able to relate it to South Sudan strategy for agricultural extension

- Subtopics to be covered:
 - √ FARM extension model
 - ✓ Extension methods used by FARM
 - ✓ Main aspects of South Sudan NALEP (pending ratification)
- Main learning points:
 - ✓ Describe the FARM extension model
 - ✓ Mention some key aspects of a market-oriented extension system
- Activities by instructor and learner:
 - ✓ Lectures
 - ✓ Plenary discussions
 - ✓ Brainstorming
- Post-training impact:
 - ✓ Change in mode of interacting with farmers, from giving instructions to farmers towards having a two-way communication

Module 3. Project management: 4 hours

Objective of the session: Equip trainees with knowledge and skills to perform management role in the FARM Project

- Subtopics to be covered:
 - ✓ Management
 - √ FARM project cycle management
 - ✓ Effective planning of FARM activities
 - ✓ Motivation
 - ✓ Communication
 - ✓ Resource management
 - √ Time management

- Main learning points:
 - ✓ Describe function of a manager
 - √ Know qualities of a good manager
 - ✓ Understand planning tools
 - ✓ Describe various time management styles
- Activities by instructor and learner:
 - ✓ Lectures
 - ✓ Plenary discussions
 - ✓ Class planning exercises
- Post-training impact measure:
 - ✓ Increased work efficiency due to improved planning and enhanced teamwork among staff

Module 4. Collaboration and networking: 4 hours

Objective of the session: Equip trainees with knowledge and skills to enable them to initiate and maintain collaboration and networking among stakeholders in the agricultural sector

- Subtopics to be covered:
 - ✓ Stakeholder analysis
 - ✓ Methods of networking
 - ✓ Stakeholder meetings
 - ✓ Creation of value chain linkages
 - ✓ Communication
 - ✓ Public relations
 - ✓ Leadership
 - √ Negotiation
 - ✓ ICT for networking
- Main learning points:
 - ✓ Describe how to carry out stakeholder analysis in agricultural extension
 - ✓ Define networking
 - ✓ State purpose of networking
 - √ Identify methods of collaboration
 - ✓ Justify why ICT is important in networking
- Activities by instructor and learner:
 - ✓ Lectures
 - ✓ Plenary discussions
 - ✓ Brainstorming
 - √ Class exercises on stakeholder analysis
- Post-training impact measure:
 - ✓ Increased number of collaborators appreciating the benefits of collaborating and networking with FARM

Module 5. Farmer organization/community empowerment: 8 hours

Objective of the session: Impart knowledge and skills to trainees to carry out community mobilization, enabling them to provide guidance on management of farmer groups/FBOs, including assisting group transformation to a cooperative society

- Subtopics to be covered:
 - √ Community mobilization
 - ✓ Social structures
 - √ Farmer organizations
 - √ Group dynamics
 - ✓ Qualities of a good leader
 - √ Handling conflict
 - ✓ Participatory decision-making
 - ✓ Cooperative movement
 - √ Formation and management of cooperative societies and unions
- Main learning points:
 - ✓ Outline the stages of group formation and their characteristics
 - √ Identify leadership skills required in group activities
 - ✓ Explain the importance of teamwork in group activities
 - ✓ Describe the social structures in various FBOs
 - ✓ State conflict resolution methods relevant to group activities
 - ✓ Describe basic objectives of the cooperative movement
 - ✓ Describe the process of forming cooperative associations
- Activities by instructor and learner:
 - ✓ Discussions
 - ✓ Brainstorming
 - ✓ Case study
 - √ Group exercises
- Post-training impact measure:
 - ✓ Reduced clientele dependency on the project and increased community involvement in development activities

Module 6. Planning with farmers: 12 hours

Objective of the session: Enable trainees to lead participatory planning with FBOs, involving the clients at all stages in planning of their activities

- Subtopics to be covered:
 - √ FARM participatory planning with FBOs
 - ✓ Participatory planning
 - √ Value chain analysis (local perspective)
 - ✓ Enterprise selection and preparation of enterprise plan
 - ✓ Local resource mobilization

- Main learning points:
 - ✓ Describe steps in participatory planning with FBO
 - ✓ Describe steps in value chain analysis
 - ✓ Describe how to prepare FBO enterprise plan
- Activities by instructor and learner:
 - ✓ Lectures
 - ✓ Group discussion
 - ✓ Brainstorming
 - ✓ Field exercise on participatory planning with FBOs
 - ✓ Case study
- Post-training impact measure:
 - √ Farmers actively participating in planning of FARM interventions

Module 7. Training and extension methods: 12 hours

Objective with the session: Equip extension staff with necessary knowledge and skills for efficient extension service delivery

- Subtopics to be covered:
 - ✓ Extension approaches applied by FARM Project
 - ✓ Extension and training methods used by FARM Project
 - √ Communication
 - ✓ Preparation of training and extension materials
 - ✓ Mainstreaming of relevant cross-cutting issues
- Main learning points:
 - ✓ Explain the various extension methods used in the FARM Project
 - ✓ Demonstrate the use of effective communication in extension service delivery
 - ✓ Effectively plan and conduct training and extension activities
 - ✓ Explain appropriate means of packaging information and technologies for use in extension
- Activities by instructor and learner:
 - ✓ Brainstorming
 - ✓ Lectures
 - √ Field practice with FBOs
 - ✓ Case studies
 - ✓ Success story sharing
 - ✓ Role play
 - ✓ Discussions
- Post-training impact measure:
 - √ Farmer-to-farmer extension effective and appreciated

Module 8: Farming as a business: 8 hours

Objective of the session: Equip trainees with skills and knowledge needed to introduce basic concepts in FaaB to assist farmers in planning their businesses and in farm record-keeping

- Subtopics to be covered:
 - √ Farming as a business basics
 - ✓ Preparation of farm business plans
 - ✓ Profitability analysis
 - √ Farm record-keeping
- Main learning points:
 - ✓ Define farming as a business
 - ✓ Make a forecast business plan
 - √ Know principles of farm record-keeping
- Activities by instructor and learner:
 - ✓ Lectures
 - √ Group discussion
 - ✓ Brainstorming
 - √ Practical class on farm business planning
 - ✓ Practical class on farm record-keeping
- Post-training impact measure:
 - ✓ Farm business plan in place when farmers start their production

Module 9. Marketing: 8 hours

Objective of the session: Impart knowledge and skills necessary for trainees to efficiently carry out FARM Project support activities on marketing of agricultural products

- Subtopics to be covered:
 - ✓ Definition of markets and marketing
 - ✓ Marketing channels
 - ✓ Identification of traders and linkages with farmers
 - ✓ Collection and use of marketing information
 - √ Negotiation
 - ✓ Contract farming
 - ✓ Quality issues
 - ✓ Standardization of measures/units
- Main learning points:
 - ✓ Define markets and marketing
 - ✓ List various marketing channels
 - √ Identify market network linkages
 - ✓ Source market information
- Activities by instructor and learner:
 - ✓ Lectures
 - ✓ Plenary discussions
 - ✓ Brainstorming
 - ✓ Case studies
 - ✓ Class exercises on marketing mix
 - ✓ Field visits

- Post-training impact measure:
 - ✓ FBOs have marketing plans in place before harvesting crops

Module 10. Monitoring and Evaluation: 12 hours

Objective of the session: Discuss the process of data collection and quality report-writing; impart knowledge and skills on participatory M&E

- Subtopics to be covered:
 - √ FARM M&E activities
 - ✓ PM&E methods
 - ✓ Completion of data collection forms
 - √ Report-writing and compilation
 - ✓ Creation and management of database of project information
- Main learning points:
 - ✓ Define M&E and PM&E
 - ✓ Discuss FARM M&E activities
 - ✓ Identify scope for PM&E in FARM Project
 - ✓ Be able to fill out forms
 - ✓ Be able to write and compile reports
- Activities by instructor and learner:
 - ✓ Discussions
 - ✓ Lectures
 - ✓ Practical class on filling out assessment forms
 - ✓ Exercises on report-writing
- Post-training impact measure:
 - √ Farmers taking up responsibilities in M&E
 - ✓ MAF staff playing an active role in database management

Module 11. Cross-cutting issues: 4 hours

Objective of the session: Provide extension personnel with relevant knowledge and skills to effectively mainstream cross-cutting issues in service delivery

- Subtopics (examples):
 - ✓ Gender equity
 - ✓ HIV/AIDS
 - √ The environment
 - ✓ Youth unemployment
 - √ Hygiene and sanitation
 - ✓ Nutrition
 - ✓ Illiteracy
 - ✓ Cultural values and beliefs
 - ✓ Insecurity

- Main learning points:
 - ✓ Discuss relevant cross-cutting issues and how they impact agricultural productivity and community livelihoods
- Activities by instructor and learner:
 - ✓ Discussions
 - ✓ Brainstorming
 - ✓ Lectures
- Post-training impact measure:
 - ✓ Relevant cross-cutting issues discussed in training and extension meetings

7. STRATEGIES FOR IMPLEMENTATION OF FARM IN-SERVICE TRAINING PROGRAM

The FARM Project's impact on the ground is heavily dependent on the performance of its extension personnel. Their training backgrounds vary—the majority are secondary school leavers, often with three months of additional agricultural training. Many have experience working in agricultural extension, either as government extension officers or through work on NGO agricultural projects with an experience component. However, most of them have limited—if any—experience using participatory methods in extension and in promoting farming as a business.

So far, FARM has provided staff training on technical aspects through its ToT component. No further training has been provided to extension staff. The prioritized training needs established in the TNA show that most of the needs relate to extension skills, project concepts, project management, and monitoring and evaluation.

The FARM extension model urgently needs changes to make it more market-oriented. This will require training on participatory methods and on the basics of FaaB and marketing. This chapter covers some of the main strategies proposed for planning and running the training.

7.1 Source Resource Persons for Training

In-service training will provide an opportunity for the different technical units of the FARM Project to inform and train staff in areas where gaps were identified through the TNA.

Strategy: Source most of the resource persons for the training from the pool of available in-house expertise. Involve a majority of the FARM specialists in planning and carrying out the course as part of a project team-building effort. Identify a few specialists from outside to inject new thinking, particularly in areas related to proposed changes in the extension model.

7.2 Select Venue for the Training

The training should provide an opportunity for sharing of experiences among staff from different working environments. The training should include field practicals where staff interact with farmer groups.

Strategy: Bring all participants to one training event to allow staff from all project areas to interact and share experiences. Select a venue within the FARM Project area (Greenbelt) so that field visits can be

arranged to participating FBOs and practical field exercises can be arranged with FBOs in the area. CTC Yei should be considered as an option.

7.3 Develop Course Program

The targeted personnel work in the field and need practical training. Varied educational backgrounds need to be considered when designing the course.

Strategy: Training should avoid dwelling for too long on theories. It needs to emphasize learning by doing through practical exercises, both in class and in the field with farmers. Training must avoid rushing through sessions.

7.4 Develop Detailed Training Modules

For effective training, a course manual should be developed with details on topics to be covered, lecture notes (hand-outs), and PowerPoint presentations.

Strategy: Assign a course facilitator (selected from within FARM or hired for this assignment) to coordinate the preparation of a training manual for the course. The facilitator will guide and supervise the resource persons in preparing their parts of the training manual.

7.5 Create Course Materials

The trainees need written materials to refer to after the training.

Strategy: Give each participant a course folder (to be prepared well before the training) containing all lecture notes and other materials (operational procedures, manuals, etc.) used in the training.

APPENDIX I: STATEMENT OF WORK

The FARM (Food Agribusiness and Rural Markets) Project is a 5-year program funded by USAID and implemented by Abt Associates and its partners: ACDI/VOCA, Action Africa Help International, Sheladia and Associates, and Risk and Security Management (RSM) Consulting. The program is designed to rapidly increase agricultural productivity in selected commodities, increase trade, and improve the capacity of producers, private sector and public sector actors in Southern Sudan to develop commercial smallholder agriculture. The FARM Project is initially focused on four staple crops which include maize, sorghum, cassava, and groundnuts.

The FARM Project focuses its work in the three Greenbelt states of West, Central, and East Equatoria—areas of great agricultural potential. It has satellite offices in each of these three states, in addition to its headquarters in Juba.

The Republic of South Sudan (RSS) is the project's key counterpart and the project provides technical assistance and training to the Ministry of Agriculture Forestry, Tourism, Animal Resources, Fisheries, Cooperatives, and Rural Development (MAFTARFCRD) on policy and other national-level issues. The FARM Project also works closely with departments of agriculture of each of the three states as well as with county and local governments and extension services. The project currently works with a network of 500 local community-based farming organizations and approximately 11,000 farmers.

As the FARM Project is currently USAID's most comprehensive agricultural program in South Sudan, it is in a position to provide leadership, guidance and coordination for the development of the agriculture sector, both with other implementing partners of USAID and for the activities of other donors.

Activity Background

The current status of extension services in South Sudan is poor. Local county and payam governments are unable to pay extension service staff. For those extension agents that are employed, their capacity is quite low with little resources at their disposal. Therefore, rural smallholder farmers receive very little public sector support. As a rapid intervention to address this issue, The FARM Project has developed an extension service program within its project which includes 3 State-Level Extension Officers, 9 Country-Level Extension Officers, and 27 Payam Extension Office—a total core staff of 39 extension offices to support its service area. The Payam Extension Officers currently have one year of work experience with the project. Each extension officer is given a motorcycle to reach out to farmers in their assignment areas. Each Payam Extension Officer currently supports approximately 18 FBOs and 100 farmers widely dispersed in remote rural areas. The project engages with county and payam-level government counterparts when possible. Payam Extension Officers have received basic agronomy training from the FARM Project, but further development programs are needed to enhance the skill level of these project personnel.

Training of extension staff has historically been on the promotion of production techniques to enhance productivity of traditional staple crops. However, as has been shown in the FARM Project, there is a significant need for a much wider range of skills by extension workers. Given the limited opportunities that many of the extension staff have had up to this point, the FARM Project intends to develop a program to bolster and broaden the extension services it currently provides to its counterparts in South Sudan. This program will be tailored to address the needs of the current situation in South Sudan. Fortunately, there are many countries that have tackled this "advice beyond production" concept and many extension agents have been trained with skills in linking, communicating and marketing. The FARM Project has strengthened these areas through initiatives such as smartphones in Central Equatoria to collect data on farmers' surplus. This initiative has gone very well but needs to be grounded in a greater understanding of extension and extension systems.

Purpose of Consultancy

The primary purpose of this assignment is to first conduct an overall assessment of the extension service needs of the project's service area and the current capabilities of the FARM Project. Upon assessment completion, the consultancy is required to develop a training program that will increase the project's capacity to deliver improved extension services to its farmer counterparts.

Statement of Work

Training Needs Assessment (TNA)

The TNA will look into the competencies required by the group (extension personnel) targeted for the training. The needed competencies are based on the overall project goals and job descriptions for the extension personnel to be trained, as well as on the needs of local FBOs, farmers, and local government counterparts. The TNA will consider the extension agents' educational backgrounds, previous trainings, and work experience gained while working for the FARM Project.

In order to ensure that the training is helpful to as wide an audience as possible, selected extension staff from MAFTARFCRD will also be incorporated into the training program. The maximum number of participants to be considered for this training would be 40 trainees. It is proposed that the training be conducted during September 2013.

Training needs will relate to the current performance of the extension staff in consideration of the assessor's observations regarding strengths, weaknesses, and deficiencies of the project's extension service program and its personnel. The TNA will also consider needs for program changes, including new ways of working and eventual new roles of extension staff.

Having agreed on a format for the TNA, it is expected that the project will quickly carry out the assessment with limited if any consultancy input and direction.

We expect this assessment to be performed during July/August 2013, allowing sufficient time for training planning and implementation during September 2013.

Analysis of TNA Results to Establish Priority Areas for Training

In analyzing the TNA results, the project will decide on the main focus for the extension training course and the main subjects to be covered in the training program. Two keys areas already believed to be important for inclusion in the focused training are I) effective communication techniques working with

smallholder farmers, and 2) helping farmers to better market their harvest. However, these areas will be verified in the TNA.

Identification of Institutions and Individuals with Required Capacity/Expertise to Conduct Trainings and Development of a Team of Resource Trainers

Having decided on the subjects to be covered by the course, there is need to identify the expertise/trainers (from the public and private sector) needed to carry out the training and develop a plan to prepare them as trainers for the program.

Identify Training Partner Organization and Venue

The venue for the training should preferably be the FARM Project's service area, to facilitate its field work in the Equatoria States. The FARM Project also needs to identify a local institutional partner to sponsor this work to ensure the long-term sustainability of the program. The Crop Training Center in Yei would be an example of a partner institution which could carry on this training once the FARM Project is completed.

Develop a Course Outline and Training Manual with Details of Training Modules

The consultant and selected resource persons/instructors will together develop a "training manual" with detailed training modules and sessions, stating objectives with the session; main learning points; activities by instructor and by learner; and key questions for evaluation.

The consultant will identify relevant training modules that have been developed in neighboring countries and that can guide development of the training modules for FARM. The NALEP program in Kenya has a full range of modules that could potentially be drawn upon. Other countries' modules can also be sourced to provide the best fit of information for the participants. For the implementation of the training, the instructors (under supervision by their training coordinator) will prepare their training materials.

Training Implementation

Implementation of the training can be done at a training institution or at a suitable venue within the FARM Project area. In order to ensure that the training is helpful to as wide an audience as possible, selected extension staff from MAFTARFCRD will also be invited to participate in the training. The maximum number of participants to be considered for this training would be 40 trainees. It is proposed that the training be conducted during September 2013.

Level of Effort (LOE): Up to 24 days, including travel.

Deliverables

- Training Needs Assessment Report, including information collected, findings, and recommendations to bolster and increase the capacity of the project's extension services program
- An extension services training strategy document for project and local government counterparts, including local partner arrangements and use of local trainers
- Four to six completed training modules for the main training components of the program

APPENDIX 2: INTERVIEWS WITH FBOs

Central Equatoria State

Nyigoge FBO, Yei County

- Describe what FARM has provided to the FBO
 - ✓ Received seeds and plowing grant
 - ✓ Trained on GAP, cooperative development, post-harvest handling, leadership
- Comments on quality of services
 - ✓ Poor quality of seeds and not delivered in a timely manner
 - ✓ Plowing grant delayed—lost one season
 - ✓ Training was insufficient as it did not include all farmers
 - ✓ ToT system not working well, as message gets lost along the chain
- Indicate additional extension needs
 - ✓ Provide cash for farmers to procure seeds rather than giving them in-kind
 - √ Look into possibilities of providing credits to farmers
 - ✓ Promote on-farm seed multiplication
 - ✓ Provide advice on IPM
 - ✓ Assist with marketing—need better prices
 - √ Advice on value addition/making cassava chips
 - ✓ Meet with farmers to discuss broader issues facing the groups, to come up with ideas for improvements

Iraga Farmers group, Loketa FBO, Gulumbi FBO in Morobo County

- Where has the group reached now?
 - ✓ Have joined a cooperative society
- Describe what FARM has provided to the FBO
 - √ Received GAP training and training on the use of fertilizers
 - ✓ Received land preparation grant
 - ✓ Received seeds
- Comment on quality of services
 - ✓ Grant received late
 - ✓ Reporting on surplus produce is just a formality by the project, as it does not benefit the group—they find market and manage to sell produce without assistance from the project
- Indicate additional extension needs
 - ✓ Need more training on FaaB

- ✓ Need training on management of the cooperative society
- ✓ Need to solve the unavailability of plowing service provider
- √ Need access to farm credits

Eastern Equatoria State

Loholi FBO (20 women and eight men)

- When was group formed and with what purpose?
 - ✓ Formed in 2009 with the purpose of crop and horticulture production and marketing as a group
- Where has the group reached now?
 - ✓ Started with eight feddans of maize; this year increased to 10 feddans. Working as a group on Mondays and Tuesdays.
- Describe what FARM has provided to the FBO
 - ✓ Received seeds
 - ✓ Did not receive plowing grant
 - ✓ Visited by extension agent four times in a month
- Comment on quality of services
 - ✓ Generally satisfied with services
- Indicate additional extension needs
 - √ Need advise on IPM (serious termite problem)
 - ✓ Interested in being supported to acquire a flour mill

Ifune Farmers Group (12 women and 10 men), Ikwotos Central Payam

- Group ambitions/future plans
 - ✓ Now cultivate eight feddans communally and intend to increase to 10 feddans
 - ✓ Would like to grow maize, sorghum, and cassava
- Describe what FARM has provided to the FBO
 - ✓ Received GAP training
- Comment on quality of services
 - ✓ Generally satisfied with the service
- Indicate additional extension needs
 - √ Need training in post-harvest handling

Western Equatoria State

Payi FBO, in Mundri Payam

- When was group formed and with what purpose?
 - ✓ Started 2008 with the purpose of increasing production on the two-feddan group farm

- Group ambitions/future plans
 - ✓ Discussing use of proceeds from last crop to buy a water pump for irrigation of vegetables on land next to the river
- Describe what FARM has provided to the FBO
 - ✓ Received seeds
 - ✓ Received GAP training
- Comment on quality of services
 - ✓ Maize seeds good but groundnut seeds did not germinate
- Indicate additional extension needs
 - ✓ Need to attract service providers (difficult to get plowing service)
 - ✓ Need to be clear over plowing grant criteria—group failed to get the grant
 - √ Need training on IPM

Troalo FBO (multipurpose cooperative society with 28 paying members)

- Where has the group reached now?
 - ✓ Has planted 117 feddans (maize, cassava, beans, and sorghum)
 - ✓ Selling in local market (chairman managed to set up his own clinic from proceeds)
- Group ambitions/future plans
 - ✓ Need to start using modern technology
- Describe what FARM has provided to the FBO
 - ✓ Received GAP training
 - ✓ Received agribusiness and finance training
 - ✓ Received seeds (now only beans)
 - ✓ Received plowing grants in 2012 and 2013
- Comment on quality of services
 - ✓ Do not receive regular follow-up and supervision
 - ✓ One-day training is too short
- Indicate additional extension needs
 - ✓ Need to spend time on questions and dialogue
 - ✓ Need to motivate farmers to do extension
 - √ Need to introduce farm mechanization
 - √ Need to translate extension materials into local language

Mundri West County Cooperative Union

- Registered June 6, 2013 with 13 executive members
- Now planning to train committee members in their roles—will then start buying produce
- Consists of five societies (another 10 societies lined up for registration)
- Has received processing machines (for cassava, maize sorghum) from FARM
- Now planning to build an office

APPENDIX 3: TRAINING REQUESTS BY INTERVIEWED STAFF

Central Equatoria State	No.	Eastern Equatoria State	No.	Western Equatoria State	No.
Computer skills	7	Computer skills	5	Computer skills	3
Communication skills	6	Extension approach and methods	4	Communication skills	3
Monitoring and evaluation	6	Reporting	4	Extension program management	3
Extension approaches and methods	5	Communication skills	3	Group dynamics	2
Group dynamics	4	Group dynamics	3	Cooperative movement	2
Farming as a business	2	Farmer organization development	2	Integrated pest management	2
Management of extension program	2	Monitoring and evaluation	2	Marketing	2
Planning	2	Project cycle management	2	Project proposal-writing	2
Integrated pest management	2	Project proposal-writing	2	Extension approaches and methods	2
Marketing	2	Post-harvest handling	I	Monitoring and evaluation	I
Record-keeping	2	Good agronomic practices	I	Planning	I
Reporting skills	2	Pests and diseases	- 1	Leadership skills	I
Crop yield assessment	I	Value addition/processing	I	Reporting	I
Project proposal-writing	I	Data collection	- 1	Tractor handling	I
Good agronomic practices	I	Cooperative development	- 1	Post-harvest handling	I
Project cycle and management	I	Farm business plan	I	English language	I
Conservation agriculture	I	Planning	1	Farm mechanization	I
English language	I	Pest and diseases	I	Photography	I
Modern agriculture (longer-term training)	I				
Mobilization of groups	I				

APPENDIX 4: SUMMARY OF STAFF TRAINING REQUESTS

Training Needs Identified by Staff	No. of Requests in Staff Meetings
Computer use	15
Communication	12
Extension approaches and methods	11
Farmer group management	9
Monitoring and evaluation	8
Integrated pest management	6
Record-keeping	6
Extension program management	5
Report-writing	5
Farmer organization and cooperative development	4
Marketing	4
Planning	4
Project proposal-writing	4
Farm business plan	3
Project cycle management	3
Data collection	2
English training	2
Good agronomic practices	2
Post-harvest handling	2
Conservation agriculture	1
Farm mechanization	1
Farming as a business	1
Leadership	1
Modern agriculture	1
Photography	1
Tractor handling	1
Value addition/processing	1

APPENDIX 5: EXTENSION STAFF TRAINING BACKGROUND AND TRAINING REQUESTED

Extension Personnel	Training Background	Requested Training			
Central Equatoria State					
Central Equatoria Senior Extension Officer	 Diploma in general tropical agriculture, Yambio Institute of Agriculture Certificate in food crop utilization and nutrition, International Institute of Tropical Agriculture, Ibadan, Nigeria Certificate in Participatory Innovation Development, International Institute of Rural Reconstruction, Kampala, Uganda, Certificate in project monitoring and evaluation, African Population Institute, Yei, South Sudan Certificate Leadership Course, Certificate in Organic Agriculture (AAH-I) 	 Data analysis/monitoring and evaluation Effective communication Computer/PowerPoint use 			
Yei County Extension Officer	General agriculture, Bukalassa, (two years) ToT training	 Monitoring and evaluation, including reporting Management of extension programs Computer use (PowerPoint and Excel) Pest management Extension approaches and methods Communication Group dynamics 			
Lasu Payam Extension Worker	Very weak, particularly in reporting Training at CTC (eight months) Training on crop management, Lugobero (three months) No computer skills ToT on GAP, seed bulking, cooperative principles and concepts (not sufficient), post-harvest handling	 Reporting Computer use (Excel, etc.) Conservation agriculture Crop production refresher Record-keeping Communication skills Extension approaches and methods 			
Mugwo Payam Extension Worker	 Best Eight months agribusiness training, CTC M&E training, Yei Agricultural Training Center (YATC) (three months) Two years with FARM Undergoing computer training by payam director 	 Administration (planning, reporting) Farming as a business Marketing - 			

Extension Personnel	Training Background	Requested Training
	ToT on GAP, seed bulking, cooperative principles and concepts (not sufficient), post-harvest handling	
Otogo Payam Extension Worker	 Crop training course, Arua (three months) Trained by DRC on reporting (not enough) ToT on GAP, seed bulking, coop principles and concepts (not sufficient), post-harvest handling 	
Morobo County Extension Officer	Basic agriculture, YATC (four months) Agribusiness training, CTC (nine months)	 Planning and management Monitoring and evaluation Computer use Integrated pest management Extension methods and communication
Wudabi Payam Extension Worker Kimba Payam Extension	 Agribusiness course, CTC (three months) Agribusiness, CTC (nine months) General agriculture, YATC (three months) Basic training, Maridi (four months) 	Group dynamics Record-keeping and reporting Extension delivery Computer
Worker Gulumbi Payam Extension Worker	Specialized course, YATC, (two and a half months) Bible correspondence studies (six months) Basic agriculture, YATC (three months)	 Marketing English language Modern agriculture (longer-term training) Monitoring and evaluation Crop yield assessment Project proposal writing Farm management and farm business plan preparation Extension approaches and methods
Kajokeji County Extension Officer		Monitoring and evaluation Computer Effective communication Project cycle and management
Kangapo I Payam Extension Worker Kangapo 2 Payam Extension Worker Lire Payam Extension Worker		Computer Group dynamics Effective communication Extension and mobilization approaches Monitoring and evaluation
Eastern Equatoria State		
Eastern Equatoria Senior Extension Officer		-
Ikotos County Extension Officer	Diploma in community development Trained as a teacher	 Pests and diseases Farmer group management Communication Computer Data collection Reporting system/formats Project cycle management Monitoring and evaluation Project proposal writing Farmer organization development
Central Ikotos Payam Extension Worker	 Senior four leaver One-year certificate, CTC (1985) Cooperative training, Bukalassa (one year) 	Extension approaches and methodsCommunicationPlanning and reporting
Lomohidang Payam Extension Worker	Senior 4 leaver, Uganda, 1999No further training in agriculture	Computer training

Extension Personnel	Training Background	Requested Training
Katire Payam Extension Worker	Training on basic agriculture by project, Ikotos (three months)	Computer use GAP Post-harvest handling
Magwi County Extension Officer	Diploma, crop production, Bukalassa (two years)	Computer use Reporting system Project cycle management Monitoring and evaluation Project proposal writing Group dynamics Extension approach and methods Farmer organizations Cooperative development
Payam Extension Worker	Three months, CTC	Extension approaches and methods
Payam Extension Worker Payam Extension Worker	Three months, CTC Three months, CTC	 Pest and diseases Group dynamics Communication Computer use Reporting Farm business plan Value addition/processing
Torit County Extension Officer	Diploma, crop production and management, Soroti (two years)	γ 6
Western Equatoria State		
Western Equatoria Senior Extension Officer		
Mundri County Extension Officer	Stock person certificate (livestock), CTC (three months)	ManagementMarketingComputer use
Payam Extension Worker	Certificate, basic agriculture, CTC (four months)	Project proposal writing
Payam Extension Worker Payam Extension Worker	Certificate, horticulture and agronomy, CTC (four months) High school certificate, Uganda Agroforestry training (two weeks)	 Extension methods Group dynamics Extension program management Integrated pest management Farm mechanization Marketing principles Tractor handling Computer data entry
Maridi County Extension Officer	Secondary school leaver South Sudan Basic agricultural extension certificate, CTC (one year)	 Computer Project management Leadership Extension approaches and methods
Payam Extension Worker	 Senior 4 leaver, Congo Senior 3 South Sudan, Yambio Diploma (two years) Agriculture, home economics, CTC (three months) Horticulture, Kawanda (two months) Computer training 	Communication Photography Integrated pest management Extension methods, roles, and responsibilities Agribusiness/linking groups to coops
Payam Extension Worker	 Secondary school South Sudan Agriculture course by AAH-I (five months) CTC (one month) 	 Preparation of business plans and project proposals Knowledge of coop movement
Payam Extension Worker	Senior 2 school leaver Training by AAH-I (five months) CTC (one month)	 English language Post-harvest handling Extension skills Planning and reporting

APPENDIX 6: LIST OF PEOPLE MET

Name	Position			
FARM Project Headquarters, Juba				
David Hughes	Chief of Party			
Timothy Amule Yobuta	Technical Program Coordinator			
Esther Titita	Marketing Coordinator			
Costa Mwale	Agriculture Production Expert			
Redento Tombe	Outreach Advisor			
Lawrence Otika	Special Advisor to RSS			
Cesar Tamale	Accountant			
FARM Central Equatoria State Office, Yei				
Simon Wani	Agricultural Production Field Coordinator			
FARM Eastern Equatoria State Office, Torit				
Rebecca Ricitello	State Coordinator			
Alfred Kenyi	Agricultural Production Field Coordinator			
Cham Puro Nygoni	Capacity Building Coordinator			
Eliaba Y. Habakuk	Senior Extension Officer			
FARM Western Equatoria State Office				
Ronyo Emmanuel Mogga	Senior Extension Officer			
Patrick Gallagher	State Coordinator			
Central Equatoria State				
Christopher Gideon L. (Lado)	Acting Director-General, Ministry of Agriculture and Forestry (MAF)			
Edmond Taban Gogo	Agriculture Commissioner, MAF, Yei County			
Aquilino Lado	MAF County Extension Officer, Morobo			
Esther Kiden	FARM Yei County Extension Officer			
Duku George	FARM Extension Worker, Lasu Payam			
Aliki Ramadan	FARM Extension Worker, Otogo Payam			
Lumori Christopher	FARM Extension Worker, Mugwo Payam			
Ngun Ko Yi FBO (Yei County)				
Isaac Batali	FARM Morobo County Extension Officer			
Mawa Joseph	FARM Extension Worker, Kimba Payam			
Baiga Robert	FARM Extension Worker, Gulumbi Payam			
Faustino Amule	FARM Extension Worker, Wudabi Payam			

Name	Position
Iraga farmers group, Loketa FBO, Gulumbi FBO in Morobo County	Farmers met: Justo Kepo, Eli Muto, John Losuba, and Joseph Abdalla
Aggrey Lokolong	Director of Studies, CTC, Yei
Eastern Equatoria State	
Loboka Alex Andruga	FARM Torit County Extension Officer
Lawiri Gabriel Lokuku	FARM Magwi County Extension Officer
Osinya Mark	FARM Ikotos County Extension Officer
Ponsiano Mori Modi	MAF, Acting Ikotos County Director
Lino Ariko Thomas	Senior Agriculture Inspector, Ikotos County
Cirillo Lino Kwonga	FARM Extension Worker, Central (Ikwotos) Payam
Luka Amai	FARM Extension Worker, Lomohidang N. Payam
Ifune Farmers Group	Ikwotos Central Payam FBO
Katire Payam	
Joseph Loliwa	Payam Extension Worker
Nyigoge FBO	Members of FBO: Keji Laudina, Martin Angu
Loholi FBO	Members present, James Okenyi (Chairperson)
Western Equatoria State	
David Mamur	FARM Mundri County Extension Officer
Nicholas Wine	FARM Extension Worker, Mundri Payam
Herbert Tunis	FARM Extension Worker, Bangalo Payam
Nimaya Christopher	FARM Extension Worker, Kotobi Payam
Jaffar Nelson	Director of Agriculture, Mundri County
Felix Simas	Senior Inspector, Cooperatives, Mundri County
Osman Suleiman	Senior Inspector, Cooperatives, Mundri County
Brown Scopas	Inspector of Agriculture, Mundri County
Abraham Malish	Deputy Chairman, Man Payi FBO, Mundri Payam
James Majana	Chairman, Man Troalo FBO, and Chairman, Man Mundri West County Cooperative Union
Aziti Wilson	FARM Extension Officer, Maridi County
James Mawa	FARM Extension Worker, Maridi Payam
Charles Nyoso	FARM Extension Worker, Mambe Payam
Charles Mustapha	FARM Extension Worker, Landili Payam
MAFTARFCRD Juba	·
Augostino Atillio	Director-General, Extension
Joseph Akim Gordon	Director of Extension